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A PROGRAM FOR PSYCHOLOGY IN A COLLEGE OF COMMERCE AND ADMINISTRATION

Psychology can contribute in two distinct ways to a course in commerce and business administration. Inasmuch as it represents the most systematic attempt to formulate the laws of human behavior, psychology is a fundamental science offering basic generalizations and working hypotheses to the intelligent consideration of problems of human action. Inasmuch as the psychologist has, in the development of his own science, produced technical methods formed in the light of the extreme variability of human activities, these methods can, in themselves, be offered to commerce and administration as a definite technology.

The presentation of psychology as a fundamental science should have a constructive and a critical purpose. This constructive purpose can best be served by a systematic discussion of such topics as the following (the illustrative material to be drawn, where practicable, from business situations): (*a*) Working conception of the physical mechanisms of action. (*b*) Basic human incentives, tendencies, and attitudes, and the mechanism of their modification, development, or repression. (*c*) Factors in learning and economy of learning and retention, as in memory, habit, acts of skill. (*d*) Normal mental functions—attention, association, perception, remembering, thinking, volition, etc. (*e*) Personality and temperamental traits, their origins, types, measurement, and their organization into personality and character. (*f*) Conditions of efficiency in work; influence of interest, fatigue, age, sex, drugs, physical environment, rewards and incentives, etc. (*g*) Scope and distribution of individual and group differences, and methods of measuring them (standardized tests for special and general abilities, achievement tests of educational or trade type, judgments of associates, etc.).

The critical purpose can be served by an examination of typical popular conceptions of mind and the pseudo-scientific conclusions

based upon them. It should also be worth while to consider such common sources of error in human thinking as (1) emotional complexes, (2) post-rationalization, and (3) undue susceptibility to suggestion.

While the student will gain some idea of the empirical and experimental methods of modern psychology from the survey of fundamental psychological facts and principles, these methods should be given special and more thorough treatment in connection with business and industrial problems. This is especially important in view of the fact that the final and specific applications of psychology, as of most other sciences, consist in the employment of methods of investigation rather than in the use of the *rule-of-thumb* formulas.

The following questions and their answers have grown out of an attempt to formulate a definite program for psychology in a college of commerce and business administration.

I. Question: What courses in psychology should be offered for the student of business?

Answer: There should be (1) a first course (from one quarter to one semester in length) covering the general field of psychology and contributing constructively and critically to the student's intellectual attitude toward human behavior. There should be (2) a second course (from one quarter to one semester in length) based upon a consideration of specific business problems and the application to such problems of psychological methods. While these two courses will probably satisfy the needs of the average student, advanced courses in experimental and individual psychology may be recommended for the student whose special interest is in personnel administration or research.

II. Question: What topics should be included in the first course?

Answer:

I. Viewpoint, methods, and relationships of psychology

1. Psychology viewed as the scientific study of the behavior of the individual in adapting himself to his physical and social environment; the aim of psychology, prediction, and control of behavior
2. Meaning and types of "adaptive behavior"
3. Meaning of "scientific study"
4. Methods of psychological investigation—casual observation, controlled observation, self observation

5. Sources of psychological information—experimental, physiological, genetic, comparative, pathological, social
6. Relationships of psychology
 - a) To other sciences
 - b) To practical arts—business, law, social work, medicine, education, etc.
- II. The physical mechanisms of adaptive behavior
 1. For receiving stimuli
 2. For transmitting and redirecting impulses—structure and action of
 - a) Nerves
 - b) Nerve centers
 - c) Neural arcs
 - d) Complex action patterns
 3. For reacting
 - a) Muscles
 - b) Glands
- III. Adaptations to environment by means of hereditary action patterns
 1. The mechanisms of mental and physical inheritance
 2. What tendencies are hereditary, and what are learned?
 3. Nature, function, and types of hereditary tendencies
 - a) Capacities
 - b) Reflexes
 - c) Instincts
 - d) Emotions and feelings
 4. Modification and conditioning of hereditary tendencies
 5. Hereditary tendencies as motives in conduct
- IV. The acquisition of new types of adaptation
 1. Relation of learned to hereditary behavior
 2. Intelligence and learning
 3. Habit—its mechanisms, diversity of form, fundamental significance in action
 4. The learning process
 5. Conditions of efficient learning
 6. Rate of progress in learning
- V. Sensory stimuli
 1. The various sense departments
 - a) Visual
 - b) Auditory
 - c) Tactual
 - d) Olfactory
 - e) Gustatory

- f) Kinesthetic
 - g) Organic
 - h) Static
 - 2. Sense-organ structure
 - 3. Physical stimuli
 - 4. Elementary sensory qualities
 - 5. Phenomena peculiar to particular senses
- VI. Selective functions of the individual
 - 1. Attention as selective activity
 - 2. Attention as preparatory activity
 - 3. Physical manifestations of attention
 - 4. Conditions determining direction of attention
 - 5. Kinds of attention
 - 6. Scope and duration of attention
 - 7. Attention and interest
- VII. Integrative functions of the individual
 - 1. Association and retention
 - 2. Relation of association to habit
 - 3. Laws of association—classes of association
- VIII. Perceptual adaptations
 - 1. Relation of perceptual reactions to simple reactions
 - 2. The sensory factor in perception
 - 3. The factor of previous experience
 - 4. Individual variability in perception
 - 5. Erroneous perceptions; illusions
 - 6. Perception of space relations
 - 7. Perception of time relations
- IX. The mechanisms of adaptation on the ideational level
 - 1. Imagery
 - 2. Gesture and language
- X. Adaptations by means of remembered experiences
 - 1. The process of memorizing
 - 2. Efficiency and economy in memory
 - 3. Memory training
 - 4. Conditions affecting retention, recall, and forgetting
 - 5. Imagination—its nature and significance
- XI. Adaptations by means of generalized experiences
 - 1. Types of problem solving
 - 2. The development of generalizations
 - 3. Concepts, judgments, inferences
 - 4. Analysis of acts of reasoning
 - 5. Reasoning and logic

- XII. Purposive control of behavior—volition
 1. Deliberation, choice, decision
 2. The meaning of “will”; “will-training”
 3. Relation of attention and interest to voluntary action
 4. Relation of thinking to voluntary action
 5. Suggestion and imitation as determinants of action
 6. Types of mal-adaptation—compensatory behavior, defense mechanisms, post-rationalizations, etc.
 - XIII. The organization and disorganization of personality
 1. Factors in personality
 2. Unification and integration of personality
 3. Disintegration of personality
 4. The idea of “self”
 - XIV. Conditions affecting efficiency of action
 1. Environmental conditions
 2. Organic conditions
 3. Motivation
 - XV. Individual variability and its measurement
 1. General and special abilities
 2. Measurement of ability
 3. Distribution of ability
 4. Correlation of abilities
- III. Question: What topics should be included in the second course?
Answer:
- I. The psychological problems of business and industry may be subsumed under
 - A. Psychology and marketing functions
 - B. Psychology and personnel functions
 - II. Psychology in marketing may be examined from the standpoint of
 - A. The consumer
 - B. The merchandiser
 - C. The salesman
 - D. The advertiser
 - E. The manufacturer
 - F. The interrelations of the psychological factors involved in the control of the market and the effect of the market upon those psychological factors(Where possible experimental and quantitative methods should be employed)
 - A. Study of consumer (i.e., what psychological factors control him) involves
 1. Analysis of wants (economic) which shows that they
 - a) Originate in hereditary patterns, *but*

- b*) Form set by social and individual experience (such as education, ambitions, customs, fashions, fads, etc.)
 2. Type of customers' activity in gratifying wants may be expressed in act of buying—analyzed into
 - a*) Impulsive—immediate response to stimulus; buying on the “spur of the moment”
 - b*) Habitual—response, organized through experience
 - c*) Volitional response, result of deliberation and decision
 3. Immediate stimulus to particularized buying which may be
 - a*) Perceptual—such as
 - (1) Color of commodity (medicines, paints, soaps, powders, etc.)
 - (2) Taste of commodity (foods, toothwashes, etc.)
 - (3) Odor of commodity (cosmetics, etc.)
 - (4) Tactual qualities of commodity (fabrics, etc.)
 - (5) Color of containers (food and drug cartons, etc.)
 - (6) Size, shape of container (suggestion and illusion of volume) and weight
 - (7) Trade-mark, trade-name, and many others
 - b*) Ideational (not sharply distinguished from perceptual)
 - (1) Association of trade-mark or trade-name
 - (2) Memory of earlier purchases—pleasant (good will), unpleasant (aversions, inhibitions, and resistances)
 - (3) Discrimination and choice, weighing of motives—(price, quality, service, etc.)
 - c*) Emotional and affective factors coloring *a*) and *b*)
 4. Remote control to particularized buying which may be such as indicated in 3 *b*) together with
 - a*) Economic condition
 - b*) Conflicting remote purposes and ideals such as ambitions, etc., all of which tend to become immediate controls
 5. Consumer's place in sale (from consumer's point of view) i.e.,
 - a*) Necessity for
 - (1) Discrimination of qualities, sales talks, etc.
 - (2) Knowledge about goods, values, prices, etc.
 - (3) Consumer defense
 - b*) Advantages of organized-buying reactions as over against random and impulsive buying
 6. Act of buying, the result of wants and of immediate control represents consumer's effort to attain maximum satisfaction with minimum expenditure of money, time, and effort, in proportion as these must be considered

B. Psychological problems in merchandizing involve

1. Study of consumer
 - a) Demand for goods, based on psychological analysis
 - b) Form in which commodity presents greatest stimulus
 - c) Controls such as
 - (1) Advertising
 - (2) Store location
 - (3) Store name
 - (4) Psychology of price
 - (5) Display
 - (6) Salesmanship
 - (7) Store policy, service, etc.

C. Psychological problems in salesmanship involve

1. Statement of function (intensification of controls—see A.)
2. Choice of salesmen, a personnel problem
3. Appearance and manner, as attention value
4. Knowing goods as intensification
5. Estimating type of customer
 - a) Economic class
 - b) Educational and social class
 - c) Psychological class, such as
 - (1) Indecisive
 - (2) Decisive
 - (3) Random
 - (4) Negatively suggestible, etc.
6. Determining how and when to close
 - a) In terms of 5
 - b) Suggesting action
 - c) Assuring satisfaction and good will

D. Psychological problems in advertising involve

1. Statement of function (intensification of wants, and controls in buying)
2. Knowing efficiency with reference to consumption
3. Knowing effect of the medium on
 - a) Classes of trade
 - b) Seasonal trade
 - c) Daily and weekly variations in trade
4. Intensifying wants through suggestion and dissemination of knowledge—thereby acting as an initiator of wants (as in case of safety razors, vacuum cleaners)
5. Shortcircuiting the diffusion in non-habitual buying
6. Accelerating the response
7. Setting the form of the response, and making it habitual
8. Study of methods by means of which these aims are accomplished

E. Psychological problems in the manufacturing end involve (see B.)

1. Knowing consumer psychology (see A.)
 - a) Psychological basis for demand
 - b) Possibilities and means of increasing demand
 - c) Form in which good presents greatest stimulus
 - d) Controls—such as
 - (1) Classes of trade—economic and psychological
 - (2) Trade-mark and trade-name (experimentally determined)
 - (3) Form in which commodity presents highest stimulus value
 - (4) Types of advertising—mediums, appeals
 - (5) Displays
 - (6) Kind of merchandising—mail-order house, department store, cash store, chain store, etc.

F. (See II, F, above)

III. Summary

- A. Consumer buying
 1. Is initiated by wants
 2. Probably random at first
 3. Has form set by social and individual patterns
 4. Is controlled by suggestion—personal, advertising, etc.
 5. Develops into specialized habits

IV. Psychology and problems in personnel administration may be examined from the standpoint of

- A. Employment—from point of view of both employer and employee
 1. Selection of worker—scientific and non-scientific
 - a) Individual differences, physical, mental
 - b) Job analysis and specification in terms of these differences
 - c) Tests—general intelligence, specific abilities, and trade
 - (1) Derivation of tests
 - (2) Testing the test
 - (3) Statistical methods
 - (4) Uses and limitations of tests
 - d) Effective placement—vocational selection and guidance
 - e) Labor classes and classes of workers
 - (1) Temperament
 - (2) Education
 - (3) Types of adjustment
 - (4) Industrial mental hygiene

B. Work

- 1 Work from point of view of both employer and employee
 - a) Distinction of work from other activities
 - b) Native ability and aptitudes of workers
 - c) Social factors, such as labor classes
2. The acquisition of skill (learning, training)
 - a) Laws of learning
 - b) Optimal conditions
 - c) Transfer of training and interference
3. Characteristics of the work curve
 - a) Initial spurt
 - b) Warming up
 - c) Work level
 - d) Loss of efficiency (fatigue, boredom, etc.)
 - e) Second wind
 - f) End spurt
4. Individual differences in efficiency correlated with
 - a) Age
 - b) Sex
 - c) Race
 - d) Height and weight
 - e) Strength
 - f) Fatigue, monotony, rhythm
 - g) Rate of work, accuracy, and speed
 - h) Rest periods, sleep, vacations, variety in work
 - i) Effects of nutrition, stimulants, and drugs
5. Effect of external conditions for work, such as
 - a) Ventilation, humidity
 - b) Light, season, climate, weather
 - c) Day and night work, diurnal efficiency
 - d) Noise and quiet
6. Motivation and morale
 - a) Incentives—wage and non-wage, direct and indirect
 - b) Attitudes—social and personal
 - c) Education and ambition
7. Labor groups and attitudes
 - a) Class phenomena, mobs, riots, etc.
 - b) Class interests, unionism
 - c) Points of view—employer, employee

C. Summary

1. Problem one of individual adjustment
2. Problem one of social adjustment

IV. Question: What should be the preparation of the teacher of such courses?

Answer: He should be a thoroughly trained experimentalist in psychology, with an intelligent appreciation of business and industrial problems.

The teacher's familiarity with business and industrial problems is necessary for two reasons:

1. That he may himself apprehend the relations. Exceptional students make this relationship themselves, and they rightfully expect their instructor to be able to do it.
2. That he may understand the interests of students in his classes who are themselves making the attempt to relate the subject-matter of their different courses.

V. Question: If business men evolve their theories of human nature, why not leave it to the student to evolve his own system of psychology of business through his own direct business experience?

Answer: Because the purpose of business education, as of any other education, is to train students by pointing out to them and making available for them as students the *best* experience of others who have been specialists in the consideration of the problems with which they will be confronted as business men and women.

VI. Question: Why not, after all, leave the relating of psychology and business to the student, who should be given good general training in the attitude, content, and technique of psychology? If this training is well done, should it not transfer to the business field?

Answer: It *should*, doubtless, but it does not. The many difficulties that professional psychologists encounter in applying the methods of psychology to business prove the utter uselessness of hoping that students will make the transfer. It must be pointed out to them just as the relations of particular business functions are pointed out to them. They are shown, for instance, the relation of the purchasing department to the sales department; they are not left to find this out later for themselves. They probably *would* discover this eventually, but the function of the school of business is to fit them beforehand with this knowledge. And thus, so far as possible, should the teacher of the specialized course point out the relations of the attitude, content, and technique of psychology to the human problems they will encounter in business.

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